1939

Five Lectures

on

G E N E R A L S E M A N T I C S

by

COUNT ALFRED KORZYBSKI

Los Angeles Society
for General Semantics
June . . . 1939

for Irving Lee Lehman
from Irving Lee
7/25/39

P r e f a c e - N o t e :

This transcript aims:

A. to present an accurate yet condensed continuity;
B. to act as study-notes for members of the series who requested that such an outline be made available;
C. to contribute a source-document to the LASGS files.

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Further,

1) The preparing of this ms. bespeaks the memory of Cora L. Williams. Miss Williams brought Count Korzybski to the Pacific Coast for his first seminars there in Science and Sanity during the summer of 1935. She founded and headed the Williams Institute and Junior College, 1917-37, Berkeley, California.

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in regard to the exhibits of the available materials of THE INSTITUTE OF GENERAL SEMANTICS, CHICAGO, ILL., and other literature in the field.

Vocha Fiske, Director
Los Angeles Society for
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R e f e r e n c e - R e c o r d o f

FIVE LECTURES ON

GENERAL SEMANTICS BY

COUNT ALFRED KORZYBSKI,

GIVEN IN LOS ANGELES

ON JUNE 2, 3, 4, 1 9 3 9,

FOR THE LOS ANGELES

SOCIETY FOR GENERAL SEMANTICS

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Transcribed by
Vocha Fiske

Working Formula For General Semantics:
"I DON'T KNOW. LET'S SEE!" - AK

1st lecture, 6/2 GENERAL SEMANTICS

I.

(Approach:) What is it all about? You may have difficulty at first in understanding G. S. for 1) what I say is baby-stuff, too simple; 2) we have much knowledge that we do not apply. In G. S. we have combined the knowledge that is current and abstracted method. The elementary results of science are well known. But what is the method behind the results? How do we get what we know? This is one of the most important questions for education.

(Discussion:) The word semantics is from the Greek - to signify, to mean. Interplay of words with words is how we build meaning in the old way (intensional). Can this be done? No, we have to start with words that are undefined. Before we can have a theory of meaning, we have to investigate terms that underlie all meaning. If you want to try a vicious experiment, take some simple word or phrase that a friend has used and ask him what he means. Then you will soon find out the meaning of what I've just said. This is very well known in mathematics. I refer you to what Keyser said in his Mathematical Philosophy about logical miracles and asses!

Our work is strictly experimental. G. S. does not work as a theory of meaning but works as a general theory of values. How do we act? By organismal evaluations. You are to understand that the term evaluation is a structural term, i. e. you cannot split emotion and intellect. Sanity can be called proper evaluation; unsanity (insanity is a legal term only) misevaluation. You ask what do you mean by proper evaluation? I answer: scientific. Evaluation has to be tested empirically. If your predictions work out, you have proper evaluation. A good example here can be found in Eddington. In text-books you get horizontal predictions; vertical ones work in living. Evaluation applies to all sciences and to your own affairs. Its standards are predictability and experimentation.

Predictability involves factors of sanity. It saves the shock of surprise. Nothing is more difficult than to discover the obvious. By example, soldiers in the world war who expected horrors, did not break down; soldiers who did not expect horrors, did. We are revising daily all we know. Predictability exists in mathematics. We learn wisdom in G. S. from mathematics but we do not use mathematics. In application we clear up the old linguistic messes. Many problems are no problems at all, just verbal fictions.

Our religious training, so education, cannot exist without Aristotle. You know why, why, why? Do you really get any answers? A limited why is alright - this is what we have in science. The unlimited why splits us. We see its results plainly in dementia praecox. (story here of taking 4 hours to explain to a student (patient); "You think with your toe as with your brain . . . look at your toe and feel better!")

G. S. deals with living reactions. (Then followed various examples of evaluation, including a story about Napoleon and Jesus Christ, one to illustrate that if you feel insulted, you are infantile, and also some comments on Hitler.) You know "Mein Kampf"? Several answers have been written to it. Lewis Mumford recently wrote one. He calls it Men Must Act. He tries to defend democracy. Remember I am not talking politics; I am talking about a general type of human reaction.

Mumford sees democracy as a way of life. To have this kind of a democracy, pre-supposes intelligence. The problem is shall we be intelligent? Can we be intelligent? Are we trained in intelligence? If so, then we can have democracy. I assume intelligence; natural way of mankind; democracy. Without intelligence, democracy is worse than anything else. Do we have educational methods that develop intelligence? The old ways kill intelligence; they're fact-cramming.

Regarding Hitler, the facts he presents are true; his connections - relations - of them, false. He has a persecution complex. The world cannot be saved by politicians. How do you react when I ask you if we should have an examination of any political leader? Can you take it? (Example of conduct of man who when dead was found to have brain tumors - also humorous story of Oriental ruler who saluted Queen Victoria by thumbing his hand-to-nose!)

Some standard of evaluation cannot be avoided. We are born into a set of values. This is why we speak in terms of neuro-semantics and neuro-linguistics. Our human levels can never avoid a neuro-linguistic or verbal environment. It plays havoc with us. Let me read you a few examples: (reading here from an article by Prof. Snidecor of Idaho, titled Emotional Connotations of Personality, Western Speech, May 1939, comprising concise summaries of life tragedies made and exposed through words).

What is peculiar about the way we use the term evaluation? It is non-elementalistic; it is a structural term. That means you cannot split its meaning; it keeps you integrated; you can't go off into verbal speculation with it. Benefit of science depends upon predictability; predictability depends upon structural assumptions on the bottom of any theory. When you have proper terminology, you have a hard-going science. How about the power of terminology? Terminology has structural assumptions that carry the day.

You should understand what I mean by structural assumptions. I recommend you read Rainich on this. In the old days, we had matter and mass; in space-time we have no mass; we have space-time curvature. We hear much of Aristotle, Euclid and Newton; and also of Non-Euclidean geometries now and Non-Newtonian physics. In Euclid we had lines that never met - parallels. Euclid built an ideal structure; equi-distant. Ride on a street-car today. Do you bump? How about Euclid? We build curves from little bits of straight lines. Non-Euclidean geometry gets us a light ray; straight line is also crooked now!

Newton separated space and time and matter - fiction! Einstein integrated space and time and curvature of space-time. It cannot be dismembered. Aristotle classified the body, mind, emotions, etc. He was elementalistic; he split. G. S. terminology does not split. Evaluation, reactions, neuro-semantic - these terms don't split. In nature we cannot split. Why split in language? If so, we go astray.

People may say from a practical point of view: "Why I never knew anything about Aristotle!" Is that so? Whether a believer in religion or not, you have had Aristotelian training; you could not escape it. (It permeates all our linguistic behavior.)

When electricity comes in, there is no more Newton and Euclid. You can build a car by Newton and Euclid but you cannot run it. It takes non-N

and non-E to do that. By Aristotle you can build a world like Europe but you cannot be sane. Sanity is more than "rough stuff". No one is as insane as a text-book!

As living beings, we have impasses; minor maladjustments enter into everyone's life; we have to have standards of sanity and insanity to be useful. The world has changed completely. This affects everyone. We live actually in an entirely different world than our fancy dictates. The older orientations live in Aristotle, Newton and Euclid, one reason why world is going to pieces. You and I live now in the connecting period. We are building up a new civilization, not with miracles but with scientific method. Personal opinion has to be backed by opinion of race: science.

We have to know about limits; now a straight line is the limit of a curve. Read Wittigstein on this. Someone has said that a straight line is whatever you think it, but a point is a place for argument! Progressive Education (Assn.?) began some 3 years ago a Non-E experiment; little has been published as yet for work is not finished.

(Advice to class - "Make notes. What I say seems simple. I give it a jocular presentation but it is a heavy foundation - make notes.")

Yet there is a connection between A, N and E; also a relation between non-A, non-N, and non-E. The new is broader than old. When you get the new, the old is only a limitation - a specific case. Have to broaden our whole world outlook. (story here of Mrs. Tomcat who declared there was very little difference between men and women, and the Irishman who thanked God for that little difference.) In science, a little difference can raise hell. It is very hard to get hold of the new as it is different from the old, but when you do get hold of the new (orientation) you will find it easier - more workable - than old.

We now pass to the problem of the mechanism of learning. (Ex. given here of squash root and its learning capacity - then ex. of amoeba.) The amoeba is a drop of life, no organs, no brain, undifferentiated. Yet the amoeba shows that life on every level has some degree of neural-muscular behavior. (cf. S&S, Ch. XXII, *p.345f.*) Child in his work on physiological gradients, a theory that is physico-chemical, shows how the rate of metabolism may become structural in the organism. Then the amoeba gets a head-end, a brain.

The nervous system is a result of the impact of environment. The nervous system and brain have the fastest rate of metabolism. I call the brain our cosmic corn; we have developed it by impact. Our cortex is one of our latest developments; impact upon impact has given the cortex layers upon layers. The linguistic layers are very late ones, a process of evolution and the impact of environment.

It is practically impossible to talk sense about the nervous system. It is a living process, an electro-colloidal transformation. I refer you to the work of Dr. Burridge; it guarantees a revolution. It makes little difference whether his theory is correct or not. The importance is that he has discovered 2 mechanisms in place of 1, the ordinary physiology with the colloids. To think colloidally you have to have the non-A (non-Aristotelian) orientation.

Fishes have different kind of adjustment, sufficient for their life, but we may have a perfect brain yet be totally maladjusted. The new brain we have is our cortex; the old one is the thalamus. (cf. rough diagram of this on p. 13 of this ms.) This verbal division is misleading. Every part of the brain is functionally connected with every other part. The predominant region in living life is thalamic; the cortical areas are our latest centers. *This is the neurological key to understand G. S.* Thalamus has no linguistic representation. Our troubles are thalamic; cannot change by verbiage.

The issue is CAN WE CHANGE THE STRUCTURE OF LANGUAGE TO INVOLVE THE THALAMIC REGION? All art involves thalamic factors. IN G.S. WE INTRODUCE THALAMIC FACTORS INTO A NON-LINGUISTIC THALAMUS AND SO WE CAN COMMUNICATE TO THE THALAMUS. With the extensional devices that the thalamus begins to understand, we use thalamic means. (Further examples given here of the experiences of pikes and minnows in learning.) Realize that whatever we learn thalamically stays put. The thalamus takes on all the impressions, excitements, reactions to stimuli. It becomes permanently overstimulated. The cortex has the important role in normal life to protect the thalamus, otherwise we get neurotic or psychotic. Here comes in linguistic structure; dogmas, creeds, etc. based on language. In most cases instead of protecting the thalamus, our heads add to the excitation. We train children in split language; we train them in split personalities. Split personality comes about that way. (ex. of the thief who asserted he did not steal.) The old problem is such that our thalamus and our cortex do not coordinate. In G. S. training we have and we do coordinate them.

I discuss in my book the experiments made with lower animals, i.e. starfish and worms. (cf. S&S, p. 347 and 123ff.) (Stories here also of the professor who shouted "Don't quote me to me!", and of the one who said that any fool could ask questions that a wise man could not answer and a student who then asked him "Is that why you flunked me?") If you cut off the head of a worm, the lesson is forgotten; it takes a worm 3 times as long to learn without a head. The organism learns as-a-whole. The amoeba is happy in a life that is slow. But we are in an impasse for we live now in a world where the scientists use their cortex. I repeat the crucial problem is the coordination of the linguistic cortex with the thalamus.

What do we know about the cortex? Very little. We do know that - functionally 1) it operates as vital generating energy - dynamogenic activation; 2) it has differential activation; 3) delayed reaction. From a colloidal point of view, there is no fundamental difference between the amoeba, muscle, and the brain. Life is to be trained whether roots, muscles or the nervous system. The truth is often shocking! Balance is to be trained between action and reaction. This applies to the nervous system. There is no such thing as nervous inhibition - the nervous system has no static parts. We have actually physico-chemical packages in us. The action of the nervous system is to regulate and control these. (ex. given of the patient who had 8 different personalities showing discordination; ex. also of chemical memory through the story of the Jew who said "I was day dreaming"; have here theory of re-incarnation.) Our latest problems are cortical - we harm them by false knowledge.

(Culmination:) Ignorance can be O. K. but false knowledge makes us unhappy. You know in human life how we always think that we know "all about ourselves"? Here comes the tragedy. With false knowledge, the cortex does not protect the thalamus but adds to its troubles.

Summary of foregoing continuity to emphasize points: (per comp.)

1st sequence:
1. G. S. acts as a method, cf. pp. 1;
2. G. S. works as a general theory of values, cf. pp. 3;
3. G. S. evaluates, involves predictability and experimentation, deals with living reactions; pp. 3-4-5-6-7;
4. Evaluation is a technical term, important as terminology has structural assumptions, does not split in language what can not be split in nature, pp. 8-9;
5. We live now in a non-N, non-E, scientific world; this takes new orientations, i. e. non-Aristotelian.

2nd
6. The nervous system results from environmental impact, pp. 2;
7. It's a living process, an electro-colloidal transformation, pp. 3;
8. Cortex is new brain, thalamus old one; we live mostly on thalamic levels; these have no linguistic representation, pp. 4;

Issue: CAN WE CHANGE THE STRUCTURE OF LANGUAGE TO INVOLVE THE THALAMIC REGION or use cortex to protect thalamus? pp. 4;

seq.
9. The organism learns as-a-whole, pp. 4;
10. We know little about cortex but we do know it has delayed reaction, pp. 4.

"God may forgive you your sins but your nervous system won't."
AK

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(Approach:) Last night we were talking about different aspects of the nervous system. We review first about the cortex: 1) it has a dynamogenic effect - it generates energy, 2) it has differential activation. Both these statements are verbal fictions. There is a 3rd function of the cortex which is not a verbal fiction. This is delayed reaction. In evolution every new layer of the brain has protected the lower one. I refer you to Koehler's experiments with pictures of apes. The reaction of the thalamus without delay has no relational meaning - no human value. Animals do not have an artificial world like we have built for ourselves. Realize to what extent we respond to signal reactions. We blow up from words that we dislike in childhood. We have to have symbol reactions for intelligent social affairs. What is education, politics, etc. to do?

The personal problem is whether we have intelligence or not. I am talking brain not political issues. What can we do about dullness and laziness? Is it possible to clear up our human messes by scientific method? This is a question of the investigation of facts, not speculation.

(Discussion:) There is one thing about the nervous system that cannot be avoided. This is canalization - Bahnung the Germans call it or facilitation. Canalization shows that new nervous impulses tend to travel the old paths or channels. There is benefit in this, also danger. This mechanism makes learning possible by experience. On the human level, the human cortex matures only about 18. Through canalization we get an immature, infantile thalamic brain. What is going on in the world today - infantilism, immature canalization. We do not have means yet to spur cortex because we canalize infantile brains.

In G. S. we have found means to stimulate cortex directly, bring about that maturity which physiologically is denied us. I draw attention now to what happens in science. In science when a definite error is discovered, it is dropped. Do we do this in human affairs? No, we argue, we argue endlessly. If you make an error, drop it. Nothing is wrong if you learn a lesson. (ex. given here of how Einstein discovered errors in the older Newtonian formulations so dropped them and re-formulated.)

G. S. deals with life. In stressing problem of evaluation, you must understand this for adjustment to life. Test evaluation by predictability. Scientific theory acts only if it covers old facts. If you introduce one new fact, it changes the whole operation and things happen. You have to verify. Is the new quantum theory crazy? No, it is the best we have to date. G. S. accepts that standard for human affairs.

We pass now to factors of predictability. Let us take a map (cf. p.13)- something when and where you reach what. For maximum predictability, the map must be similar in structure to the territory for maximum results. Contemplate the relation between the territory and the map. Its fundamental premises are non-A; humanity today lives under A; science works with non-A premises.

Non-A premises:

1) Map is not the Territory - non-identity,
2) Map is not all the T - non-allness,
3) Map is self reflexive.

The old A premises give dog-matism, cat-egories, absolutism. I refer you

to Bertrand Russell on illegitimate totalities. Self-reflexiveness gives us a problem that has been entirely disregarded. Royce of Harvard discovered self-reflexiveness. This problem is one of multiordinality. (cf. S&S, Ch. XXVII, *section B, p. 433-42*). Self-reflexiveness applies to every form of representation. It applies to language - we can talk in language about language. (Ex. given here through story of doctor who instructed a beginning medico "Always and never are 2 terms which always say never.") The self-reflexive problem is on the bottom of multiordinality. (Ex. of how the depression began - does yes always mean yes, and no, no?)

We have to adjust the structure of language to the structure of facts. Crucial to have a similarity of structure between M & T. Make an empirical investigation by observation of whether our language is similar in structure to facts. I recommend that you read Wittigstein who starts his book and ends his book with the statement, "Whereof one cannot speak, thereof one should be silent." Incidentally, one of the best things that Bertrand Russell has written is the introduction to Wittigstein's book. Can you understand what the structure of language means? I am not talking about the structure of a sentence. Stop masturbating your salivary glands!

A working formula for G. S. is "I don't know, let's see." Let's see about the structure of language. Life does not follow verbalism. Life has its own rules which we have to discover. The results of mathematics are solid; elementary arithmetic began empirically with function in it; this was generalized into algebra, then analysis. The human side of mathematics is method, not interplay of formulas. When engineers build a bridge do they use a language similar in structure to facts? Yes; but our human structures collapse because in human affairs we do not accept scientific method.

Realize the terrors of language; their recurrent dramas are serious. (ex. given here of faces, masques, making public speeches, hospitals for the mentally ill.) Do you know that line from Housman:

"I, a stranger and afraid in a world I never made"?

I stress now that if you want to benefit from my work follow the devices. In the old language we cannot avoid talking non-sense. Very well, then warn your hearers that you talk non-sense. I warn you now I am about to talk non-sense. Let's see about the structure of language.

(Ex. given here by holding up stick or cane and asking if we could divide matter, space and time in it as an object; class replied no. AK said then - take away matter, you have no stick; take away space, you have only a point; take away time, you have just a flash.) These are facts; they are the structure of nature; they are non-elementalistic. The work of Einstein is revolutionary for physics because the language fits the facts; the language fits the structure, the process. In the living organism body-mind, emotion-intellect, etc. are interconnected. But do we separate them verbally? Do we split matter, space and time verbally? Life is non-el, language is el; we have to adjust the structure of language to be nearer the facts.

Inspect persons and what do you find - everyone is an absolute individual; here is man$_1$, here is human$_2$, here is Smith$_1$, 2, 3, etc. No verbalism here - facts. I introduce now 2 technical terms. Look under index of any book on logic for intension and extension. Terms are not new; Aristotle may have made them; anyway he knew them but he never applied them.

A definition by intension is one by properties. You know Plato's classical definition of man as a featherless biped. It applies to everyone and covers no one. This kind of thing gets nowhere but to the verbal brink of non-sense.

By extension, we mean the inspecting of a class of individuals made up of $Smith_1$, $Smith_2$, $Smith_3$, etc. (This acts through numerical subscripts or indexes). (Such) extensional methods are applied only in G. S. and in mathematics. No mathematician is interested in the definition of a number for he shows the behavior of numbers. The power of mathematics is uncanny. It is based first on empirical operations, then verified. (Story here of revising the advice to Mary be good, to Mary be careful!)

The power of mathematics is extensional. Generalizing comes later. Have facts first, then words for them. What happens to you and me is that we are taught language before facts. Natural order starts with facts and then generalizes. The reverse order is pathological. We have to understand that we are trained in this pathological order. Take the dictionary - what does it do? Reverses bla-bla into tra-tra indefinitely.

I shall now take the devices or techniques for extensionalization in G.S. There are 5:

1) indexing
2) dating
3) using etc. permanently
4) using quotes
5) using hyphens

I recommend that you try reading the Bible with non-A punctuation. It will become a new book. I point out and emphasize that you can only speak with security provided you date what you say. Only talk at a date makes sense. We need to date what we say for with new facts we need to revise what we say. We have to go by facts, not only those we know personally but those we know indirectly by science, etc. In G. S. we start with observing of individuals, generalizing for the time being as we need. Our knowledge becomes hypothetical, not dogma. (Ex. given here of the 3 little girls investigating the box of matches - the little "beast", the verbalizer, and the moron, and the results of G. S. training. Ex. also given of the chair episode - cf. S&S, p. 424 for details - showing the "cussedness of the object" and the consciousness of abstracting.)

When we do not use cortex we copy animals. (Ex. given here of student who wrote, "Do I copy animals in my stomach reaction? Do I copy animals in my nervous system? If you say yes, it will make no sense to me." And AK's answer. Diagram of this ex. may be found in S&S outline by AK in G. S. Congress Re-prints, Arrow Editions, 444 Madison Av., N. Y.)

Indexes and dates have to do with timing. Physically you have grasped the cortex. You have done this automatically for by indexing and dating you have delayed your reactions. This is how direct neurological training in G. S. works. Another thing of importance is that mathematics finds similarities in differences and differences in similarities. I recommend to those interested in this you read Sylvanus Thompson's little book on Calculus Made Easy. When we index and date, we get a new orientation. Learn to do this permanently in your heads. It makes us cautious because we deal with realities.

The use of indexes leads to etc. Non-A punctuation to avoid repetition of this is ., Etc. helps us get away from the allness. I call indexes, dates with etc. working devices. Quotes and hyphens I call safety devices. We have many elementalistic terms; they are thoroughly irrespon-

sible; we have to use them; warn your hearer then the term is irresponsible by using quotes - 'thinking' for example. Hyphens help us establish relations; make non-el terms out of el ones. (For the explanation of the principles upon which these devices are based, students are referred to the index of S&S for the specific sections that treat of allness and non-allness, circularity of knowledge, identification, multiordinality, etc., and especially to Book II, Ch. XXIV-VII, p. 371-451, *the process of abstracting*).

These devices have to do with the consciousness of abstracting. They bring us to a natural order of evaluation. (Ex. given here of a disk, manufactured by the lower nervous centers; ex. also given of the thalamus acting like a motion-picture film, and the cortex (in connection with words) like the little static images seen when one stops the film. Further ex. given of ascribing blueness to object - cover of pamphlet hanging on wall - when the evaluation is a process; this implies relations. Mathematics expresses what is there (pointing) and what is here (pointing) by equations. The tensor calculus gives us the equation of a relation that is absolutely - and we mean just that; the tensor calculus is often called the absolute calculus - workable. The formula goes A/B:1.

(Culmination:) We can now introduce real mathematics into personality study, not just numerical data like the I. Q. We begin too to understand something about brain waves. But it is too late now to go into that. What all this means is that we have to bring up our orientation to the level of the world we now live in.

. . . . . .

"The trouble with persons fanatical
Is a failure to be mathematical!" -

Summary of foregoing continuity for ready reference: (per comp.)

1st sequence
(1. Delayed reaction gives us human values; this involves the evaluation of symbol reaction to words, cf. pp. 1-2;
(2. Through the canalizing of the immature cortex, we get infantilism, pp. 3;
(3. G. S. uses methods (extensional) to stimulate the cortex directly, pp. 4-5;
(4. NON-A PREMISES FOR ORIENTATION INCLUDE: NON-IDENTITY, NON-ALLNESS, AND THE SELF REFLEXIVENESS OF LANGUAGE, pp. 6-7-8;

2nd seq.
(5. Apply the extension devices, pp. 8;
(6. Intension is a verbal fiction, pp. 7-8;
(7. Extension acts uniquely, individually, by observation, pp. 8;
(8. Workable devices mean using indexes, dates, etc. in one's head continually, safety devices are quotes and hyphens, pp. 13-14-15-16.
(9. Devices make us conscious of abstracting and of the natural order of evaluation.

. . . . . .

(Approach:) I need to remind you of the relation between the map and the territory; also that predictability is the proper test for evaluation. Most of what I am telling you is based on the revolution in science that has been going on the last 50 to 80 years. In the old ways, we had positive and negative. We interpreted positive as something desirable, negative undesirable. Today this is reversed. The only scientific results are negative, i.e. hypothetical. The negative becomes fundamental; the old cannot exist. We are sharpening our orientations, getting closer to facts. The premises of G. S. are negative; we learn about the world when we know it is not so. (Story of Mark Twain and mind and matter. "What is matter - never mind. What is mind? - it doesn't matter!").

(Discussion:) We pass now to a simplified theory of matter. The atom is the core of the electron. Electronic structures cannot be seen; they are inferred (sub-microscopic level). (Use of blades again which when rotated produce object called disk to emphasize how the nervous system creates what is labelled disk.) Eddington gives an interesting example of the process we call matter. It is of a cathedral being like a swarm of fast-moving fire-flies. There are really no walls but you can't get out because electrons are there.

Knowing may be timing. When you have a knowing about knowing, this is a higher order of abstraction; this is the human level. In laboratories we produce daily elements not made by nature; man adds cortical work to the work of nature . . . Ford has no humanity in him despite his sentimentality . . . (Story here of pigeons to show structure of modern science, based on inferential data.) All lines in science have to converge. Geometrical intuition is thalamic, creative. Verity by analyses etc. are cortical. There is no why about 1st order facts; accept 1st order facts on their face value. 1st order facts cannot be explained although we may try to understand them. We have to depend on undefined terms. Mathematics accepts that. For example, you have a pain, no matter what you say about the pain, because you are speaking on verbal level, it is not the pain. Whatever you say about an object,is not the thing. There are unspeakable, silent levels. (AK blew smoke-clouds here to illustrate) There are objective, yet non-verbal, levels; also inner feeling levels.

Colloids are very important. Inorganic colloids produce geometrical forms. Where is that source of energy that makes colloids possible? Fundamental energies of the world: 1) working of electricity - electrical energy pulls forces apart, 2) surface energy pulls them together. Think about yourselves. Whatever you do is registered in the nervous system. You will be more careful about what you do. Understand yourself as a colloidal jazz, i.e. electro-colloidal dynamic configurations. (cf. S&S, Ch. IX, *p.121* for summary on colloidal behavior). This explains how shock therapy works, also G. S. Metrasol is colloidal, insulin likewise. Some of the upheavals are a pitiful sight. A 1 to 1 correspondence is colloidal. This gives an infinite-valued or multi-valued orientation as science has. The old A orientation is 2-way, just either-or. It won't work in our present world. Nothing in the world is 100% ---- unless a 100% American! This means statistical averages - a different orientation from allness - they give maxumim probability.

Adult infantilism is a step toward dementia praecox. (Ex. here of student who wrote wanting to help a friend who first began to act strange by

sitting on floor and tearing up bits of paper, then became promiscuous, and next went to a woman living across the street and said "Do not worry any more, Mrs. Jones. I will never sleep with your husband again." The facts were she had never done so. AK advised his student that she could not help her friend; the colloids were too far dispersed. (Now friend is locked up for good.) We are paying more attention to the effect of the weather on medical cases. I advise you to read Peterson on this. (Ex. here of the differences in Lincoln and Douglas, one lean, thin, tall and the other stout and short and their reactions to weather.)

Get into your heads that we live in a process-world. Levels become important. The world of objects is macroscopic, what we see by the naked eye; the microscopic level is what we can see through instruments; the sub-microscopic is inferred. We call this last level in the natural order of evaluation a series of events. Complications in higher orders of abstracting proceed by geometric ratio. This is what we get in life. When you have a mechanism that acts for an indefinite number of possibilities then you have something that works even when details are not known. When we view everything as a 1st order fact, we get surprises.

Humans have electrical reactions to life. They are electrical reactions of life. The psychogalvanometer shows this, also their frustrations. It shows 1) words have electrical effects, 2)the verbal report is never true to the organismal response. Language has electro-colloidal effects so language becomes a branch of natural science. Words kill and words cure. (Story here on you are talking to the Almighty.)

Language is one of the means of re-orientation. Results of brain-wave study show that even though men have benefitted by psycho-analysis, the length of the brain-wave does not change. Many people 'think' there is something mysterious about dimensions. Get that out of your heads. Dimension merely means the number of factors you have to know before you can know something. The 4th dimensional world is static. (cf. S&S, Ch. XXXVIII. *p. 671-72*).

The natural order of evaluation is based on asymmetrical relations. (Brief demonstration here with the Structural Differential, cf. S&S, p. 393,398, 414, 427 for diagrams and detailed text). The S. D. is a diagram of a process. It shows the event is more important than the object, the object is more important than the label or description, the description is more important than a lower order inference, a lower order inference is more important than a higher order inference, etc., etc. We are speaking and living by going up and down all the time mixing these levels. If you miss the level of your abstracting in a serious problem, you cannot solve it.

Use your hands; this is very important in practice. You are working to order your reactions; this gives you delayed reactions. There are all kinds of messes and fictions you have to clear up. Take the fiction hate-father, hate-mother. Very well allocate the hate, then date and you eliminate. Politics make use of generalizing language; as such is fiction. Neuro-linguistics are facts, not fiction. The S. D. shows the premises of G. S. and the devices. These supplement each other. The S. D. translates the premises and the devices.

All existing art has thalamic appeal which, if high art, works better than science sometimes. Poetry and literature in general involve thalamic factors. The S. D. is a thalamic affair. Realize the difference

between signal reactions and symbol-evaluation. The bottom of our difficulties is that signal reactions are not fully human. We are dealing with multiordinal mechanisms - these are natural to language. When we stop abstracting, we copy animals. Abstracting is the dynamic characteristic of humanity. Test it! I give in my book quite a list of multiordinal terms such as yes-no; true-false; fact-reality; love-hate; etc. They have no content outside of a specific context. The multiordinality of fact and reality acts as a key for psychiatry.

Take some examples: You may have doubt; this is 1st order. If you doubt the doubt, you have 2nd order - scientific criticism. Knowing about knowing is 2nd order. Passing to the 2nd order introduces beneficial effects instead of the harmful 1st order ones. Sex of the 1st order is quite different from sex of the 2nd order. 1st order sex is enjoyment; 2nd order sex enjoyment of the enjoyment. If you have the 2nd order, can you be promiscuous? Promiscuity splits women. It is interesting that women remember the worst of their lovers, men the best of them.

Facts always have thalamic components. Study the section in my book on abstracting and the one on multiordinality. An understanding of multiordinality provides help for women during change of life. M. O. terms are at the core of human destructive action, also desperate action. Consciousness of the mechanism does the work. The mechanism must be formulated in a thalamic way. I repeat performance of or for sex is not a cure. Consciousness of the mechanism is a cure.

(Culmination:) I shall close by giving you an extensional theory of happiness. I diagram a circle, quite large, with a big E; then a very small circle with a small e, and then a middle-size with an F. This stands for fact. Regardless of the fact, most people have expectation with a big E. I advise you in life to expect nothing with a big E. Expect with a small e. Expect nothing in life without beating; also do not expect anything after beating. If the facts turn out better than you expect, you will be happy. If they do not turn out, you will not be unhappy. By extension we deal with living beings, not with definitions and intension. A theory of happiness is not new; what is new is training for minimum expectation. The results are different from when you start with a big E: without beating or with beating, you can face facts and adjust yourself to them.

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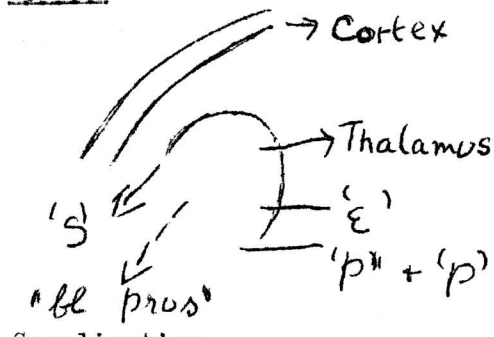
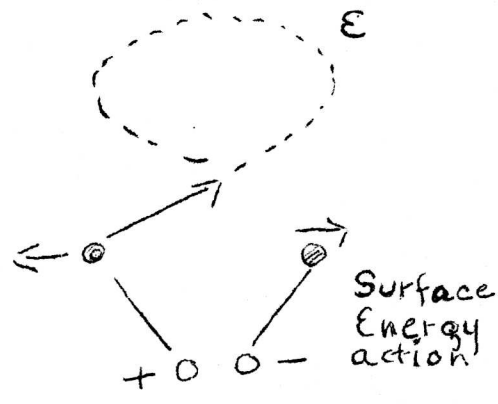
/D i a g r a m s/

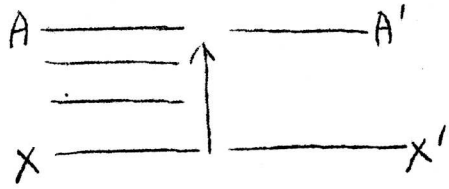
Rough Sketch of the Working of Nervous System

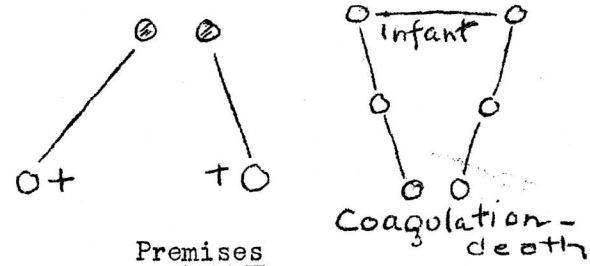


Colloids



Canalization





Territory

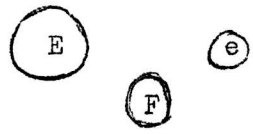
	S. F.	Chic.	N. Y.
Map_1	S. F.	Chic.	N. Y.
Map_2	Chic.	S. F.	N. Y.

Premises

1) Map is not Territory *
2) Map is not all the T.#
3) Map is self-reflexive

*: non-identity; #:non-allness

Theory of Happiness



//: copied from those put on blackboard during 2nd and 3rd lectures.

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K e y T e r m s: (listed by comp.)

ORIENTATION: non-A. infinite valued, 1 to 1 correspondence
EVALUATION: tests - predictability and experimentation
ORDER: (a bridging term for human affairs, sense of betweenness)
PROCESS: function, relationship, the kind of world we live in
STRUCTURE: (a manifold of interrelations)
ELECTRO-COLLOIDAL DYNAMIC CONFIGURATION: a living process
ELEMENTALISTIC TERMS: words that split processes and relations
NON-ELEMENTALISTIC TERMS: words that do not split
INTENSION: an el term, definition by properties - similarities
EXTENSION: a non-el term, description by observation - differences
EXTENSION DEVICES: indexes, dates, etc., quotes, hyphens
NATURAL ORDER OF EVALUATION: process, object, label or description, inference of lower order, inference of higher order, etc.

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List of study-references in Science and sanity, inserted in ms.:

ABSTRACTING, process of, Ch. XXIV-VII, p. 371-457
AMOEBA, behavior of, Ch. XXII, p 345f
COLLOIDS, summary of, Ch. IX, p. 121
CONDITIONALITY, Ch. XXI-III, p. 326-65
EPISODE WITH CHAIR, p. 424
EXPERIMENTS WITH STARFISH & WORMS, p. 347 and 123ff
FOURTH DIMENSIONAL WORLD, Ch. XXXVIII, p. 671-72
GROUPS, THEORY OF, INVARIANCE & TRANSFORMATION, CH XIX, Section C, p. 280-87
INFINITY, Ch. XIV, p. 204
MULTIORDINALITY, Ch. XXVII, section B, p. 433-42
NEW QUANTUM MECHANICS, Ch. XLI, Section E, F, G, p. 714-28
STRUCTURAL DIFFERENTIAL DIAGRAMS, p. 393, 398, 414, 427

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Point (per comp.)

The style of punctuation used in this ms. warrants explaining. AK lectures extensionally, i. e. he shows. He acts a great deal and deliberately. It is impossible to record these facts of communication on the printed page. The nearest hint that could be employed was punctuation for timing, e. g. ; for longer than , and shorter than . and - for more undefined pausing.

If students will read these notes with this in mind, it may help them recall many characteristics of the living communication or 1st order omitted by ms. Some will then perhaps re-vitalize for themselves something akin to the weight yet playfulness of the original presentation.

Probably half of the actual presentation-time was used in the giving of examples. These have been indicated rather than described for 2 reasons: 1) Examples presented extensionally are the most difficult thing to record in words; they need pictures; 2) it seemed wise to emphasize for students something of the content and connections of G. S. training, i.e. structure and function as far as possible.

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FOR AK, G. S., etc.:

Blah-Blah$_{dee}$ and Blah-Blah$_{dum}$ set out to rah and rattle

For Blah-Blah$_{dee}$ said Blah-Blah$_{dum}$ had spoilt his verbal prattle;

Just then appeared a cosmic corn as massive as a barrel

That silenced both the Blah-Blahs so they quite forgot to quarrel.

(with apologies to Lewis Carroll -vf)

Synopsis of 6/3 a.m. talk
Donald McLean, Chairman

GENERAL SEMANTICS
AND PSYCHOTHERAPY

(Approach:) In G. S. we are more interested in prevention than cure. In training with G. S. from our childhood we find that psychic trauma becomes impossible. One of our crucial problems is canalization . . . our troubles are thalamic . . . the pictures stay put that we learn in childhood. I deal only with students; you deal as psychiatrists with patients. It does not matter what mechanism you give your patients; it will work if you give them a mechanism to work out.

(Discussion:) We are passing from old credos . . . Promiscuity, we know, is not good for men; it is definitely harmful for women. Talk in terms of evaluation; lack of evaluation is evaluation of a low order. Evaluation can be negative or positive. You have to understand that you are dealing with multiordinal mechanisms.

In G. S. the general problem has extreme simplicity of approach. We grant 90% of Freud but his technique is useless. The methods of Freud are fact-finding, e.g. 90% of human beings show masturbation. What is your main difficulty? Masturbation, we know, is infantile; it is anti-biological.

What we don't understand about sex is that 90% of the energy of the gonads can and should revitalize the entire nervous system; 10% go for sex of the 1st order - reproduction. Idiots and bitches . . . (ex. given here of intercourse between an idiot and a bitch with comment on the bitch's biological hopelessness and the idiot's human shamelessness.) I have learned that physiological tickling is not sex. It takes biological sex to be sex. Infants with tassels and infants with holes don't know this.

To talk by example involves the thalamic character of communication, not definition. Factors involved are thalamic factors; you can visualize them. Order is also thalamic, kinesthetic. In general psychotherapy, have to consider talk. As example take some water - the cortex - with chalk - the thalamus. The chalk represents the affective components; the water the verbal ones. Can you mix talk without sediment?

Our attitude is colloidal. Dementia praecox and infants have over-dispersed colloids. Words have electrical effects; this makes psychotherapy crucial. You have to understand you are working with electro-colloidal-dynamic-configurations . . . The cortex has one function that is not a fiction - delayed reaction. This can be brought about automatically. Pinch your finger! What you say of a pinch is not what you experience; this is on a silent, unspeakable level. We have to get very straight how the word is not the thing.

We are up against signal-reflex reactions; a symbol reaction has evaluation. All psychoses and neuroses involve signal reactions. (Ex. of the Lithuanian who never spoke and hardly moved and who on being shown AK as a Pole suddenly struck him.)

The consciousness of abstracting applies endlessly. I worked 6 months in a criminal ward of a Federal institution. There was much hate there - the majority were mutilating and ruthless murderers. Yet human energies have limits. If you have only hate, nothing works. When you have a positive theory (G. S.) you can use semantic shock which is colloidal.

This is how even insulin works in some cases. In passing to a higher order of abstracting you then can get a hate of hate.

Do not know what to do with manic-depressiveness . . . The promises of G. S. are more close to facts than the old ones. My opinion about paranoia is that it's not heriditary biology but environmental biology. You know how paranoics can talk; do you know the story of the one who said: "What can a psychiatrist do for me? I can always out-talk them!" Paranoics are extremely intensional; they associate words with words without limit. Have to work to extensionalize them.

The hysterical mechanisms do exist for projection . . . point here, why not project useful stuff? We mistreat ourselves and others continually through false knowledge . . . remember humans are very complex; men are more than little drops of vinegar! You can use a mirror with dementia praecox; they like it and it is helpful, but never use a mirror with a manic-depressive; he can't stand it.

Make use of the extensional devices; make use of the hands. These things work . . . We have a lot of false knowledge about homosexuality, a most stubborn form of infantilism . . . realize that homosexuality is not masturbation; that anatomy does not matter; and that performance is not sex.

Stuttering has no one general cause. It acts as a thalamic disturbance of some kind resulting from some painful experience. Treatment for stuttering connects with relaxation; also here, as elsewhere, we have to develop a general freedom of symbols, working toward full conditionality. (cf. S&S, Ch. XXI, XXII, XXIII, p. 326-365.)

(Culmination:) (demonstration given here), hand has to be extremely soft; men to strip to waist; women can have a light slip on; everything that affects blood pressure has to be removed. The principle is that the thalamus controls blood pressure. When we get hurt in childhood, this remains on level of organismic memory in consciousness. Handle yourself; you will be gentle with yourself; no massage, no petting; get the feeling of yourself, i. e. verify yourself; shake yourself up and down a little; do no talking. Men have defense in arms; women have defense in stomach. Life is bewildering; we are put on the defensive but being on the defensive is no defense . . . Results are reached when relaxation remains permanent. (*cf. bibliography re monograph #1, in which, p. 46-8, details are given for neuro-semantic relaxation*).

Comp. note: The Neurotic Personality of our Time, and New Ways of Psycho-analysis, both by Dr. Karen Horney, are worth reading.

Synopsis of 6/4 a.m. talk
Dr. Lowell C. Frost, Chairman

GENERAL SEMANTICS
AND EDUCATION

(Approach:) The problem of education is one about which we have fooled ourselves since the beginning of mankind. Schooling means little. From the moment a child is born he is being educated. Neuro-semantic factors are at work, and particularly neuro-linguistic s.r. as human environments are verbal ones. Educational environments of some kind cannot be avoided; likewise the problem of adjustment at some level. Train the child then from a life point of view: extension. Education in terms of verbalism does not face facts. Knowledge is mathematical in character.

The approach of G. S. shows when we face a situation we find a solution. Any child can solve an equation of the 1st order. Galois proved that above the 5th order equations could not be solved by algebra. Today we have the theory of groups by which we can solve any equation. (cf. S&S, Ch. XIX, *section C. p. 280-87* for theory of invariance, transformations, etc.) We discover facts to begin with if facts are unknown. Ex. of the new quantum mechanics through which we now know that waves travel but electrons do not. (cf. S&S, Ch. XLI, *sections E. F. G. p. 714-28 for details.) Solving problems is a question of human ingenuity, not an Almighty alibi. To talk with security takes facts; talk all you want but know when you talk whether you have the facts or not!

(Discussion:) I stress the G. S. interpretation is flexible yet matter-of-fact. . . Our difficulties are always the same. We start with a generality. Ex. of $chair_1$, an object and $chair_2$ the label, noise or definition (and showing how we never sit on a definition!) G. S. overlaps education and psychiatry. In any case its results come from extension. We may view all education as a generalized psychiatry. If you treat education on verbal levels only, you have trouble. (ex. given of levels of abstracting orders of democracy.) All talk is bunk without an index and a date. In modern science we begin with limitations. We do look for generalities but these come after the single instances . . . Language originally had an extensional origin. Law, Roman Catholic doctrine and a host of other things reverses with precedents and codes the original operations of language. We are taught to learn a great deal of verbiage 1st before we learn or experience the actual facts. From such training we get endless arguments. Extension discovers and then orders facts for us; agreement becomes possible; we don't mistake noises for things or processes.

Distinguish between words and noises. A word has to be a symbol, not a signal. There is nothing to be known about noises or spell-marks . . . I refer you to the chapter on infinity in my book. (cf. S&S, Ch. XIV, p. 204.) Clear up verbal messes; don't legislate.

I take up in my book the operations of extensional analysis or living facts. (Ex. of question, "Do you believe in G-o-d?" with a showing of how G-o-d is a noise out there - by pointing - and a symbol here inside breast - pointing.) A child should know the relations of words to facts. If you allocate G-o-d as a symbol inside, there is no quarrel; I have nothing to say. Allocate the symbol; find where it belongs. Dogmatic theories then disappear. The Hindus and the Chinese have no fiction about God but recipes for wisdom, fineness and ethics.

Question asked here: When a symbol is allocated within, does it remain thalamic?

Answer by AK: If it is your creed, it involves thalamic factors. God has no thalamic factors for many but what I say about God has.

Another fundamental issue which has been completely neglected is how some words, many words have multiordinal meanings. You can read about this in my book, (cf. S&S, Ch. XXVI, *section B. p. 433-42*) there is not time now to go into it. Science depends upon terminology, special terms. We know in G. S. how elementalistic terms split facts; we select then non-el terms deliberately. They mean the dfference between speculations and structural assumptions . . . The problem of structural assumptions behind terms makes every difference in orientation. (Ex. given of structural key terms used in G. S. - order, structure, function, relations, extension, evaluation, etc., etc.) Structure in general can be defined in terms of relations. Tell child what terms in language are relational.

The revolution on which most of what I am telling you is based is already 80 years old; it marks the passing from the objective level to the process level. Remember the disk! Now we deal with macroscopic, microscopic, and sub-microscopic levels. Sense data are extremely important for survival value. (ex. of "blue" as a projected neurological process and showing how such projected mechanisms go on into hysteria.) Animals are adjusted entirely for survival value on their level. Our human levels already have great danger for in all mental illness, you have delusions, i.e. a refinement of projected mechanisms.

We may use language as we do today but the salvation of the child depends upon knowing what we are doing when we use language. We falsify facts every time we use the is of identity. Realize what language means today - the English and Americans have literally made Hitler by words - more dynamite than anything else. Psychotherapy brings people back to life just by language. Such implications for education lead far into the field of insanity and adjustment.

(Culmination:) G. S. aims in education include: - and I can't go into detail - 1) Elimination of false knowledge systematically; the structure of language involves false knowledge; the child should be warned false knowledge is being taught him by and through our very teaching methods. 2) Children are born extensional; we ruin them by education; the dynamic character of a process-world requires an infinite-valued orientation. 3) Passing from dynamic to static is difficult, so be taught child early; remember any dimension shows how many factors you have to know before you can know something; (ex. of Newtonian and non-Newtonian explanations.) 4) Teaching generally of the elementary data of physics and physiology, also of electricity and the colloids, and finally the emphasizing of the coordination of cortical with thalamic reactions and vice versa.

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Bibliography

PRIMARY SOURCE FOR GENERAL SEMANTICS:

Korzybski, Alfred: Science and Sanity, Science Press, Lancaster, Pa. 1933 p. 798

cf. also by AK.: Manhood of Humanity, Dutton & Co., New York City, 1921

further, titles of addresses, bulletins, pamphlets, etc. by AK in the order-catalogue of the Institute of General Semantics, 1234 East 56th St., Chicago, Ill.

BOOKS REFERRED TO BY AK DURING HIS L. A. GS 1939 SERIES:

Lewin, Kurt: Topological Psychology, Mc-Graw Hill
Mumford, Lewis; Men Must Act, Harcourt Brace
*Peterson, Wm. F.: The Patient and the Weather, 7 volumes, distributed by Edwards Bros., Ann Arbor, Mich.
Thompson, S. P.: Calculus Made Easy, MacMillan

WRITINGS MENTIONED PARTICULARLY BY AK FOR STUDY DURING SERIES:

The work of Dr. Burridge of Lucknow University, India, on cardiac reactions, and a new physio-psychology, and that of Dr. A. M. Child: Physiological Foundations of Behavior, with Dr. C. J. Keyser: Mathematical Philosophy;

also by W. Koehler, G. Y. Rainich, Bertrand Russell, and L. Wittigstein, whose publications are listed in the bibliography of S&S, p. 767-81

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Attention is called to the publications of the Institute of General Semantics, including

*Monograph #1, Language and Speech Hygiene by Dr. Wendell Johnson, April 1939. Although seeming to treat of a specialized field, this contains a succinct, understandable outline of GS orientations, techniques and terminology, most useful for general readers.

*Linguistic reprints by M. M. Kendig, Sarah Michie, etc.

*Psychotherapy reprints by Dr. Douglas Gordon Campbell

Order-catalogues listing the above among some 25 titles to date may be had from the Institute of General Semantics, Chicago, Ill. Address - M. M. Kendig, Educational Director, 1234 East 56th Street.

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*: especially recommended by compiler

A d d e n d a

1) RELATIVE TO THIS TRANSCRIPT:

A. Due to mimeograph-costs, a complete account of AK's LA/39 lectures was impractical. The present report aims to present a verbatim yet partial record only. Seminar students should consult their own notes for amplification if desired.

B. For brevity, certain devices are used, viz.:
AK stands for Alfred Korzybski,
G. S. stands for General Semantics,
S&S stands for Science and Sanity,
S. R. or s.r. for semantic reactions, etc., etc.

C. Any addition to the script made by the recorder for purposes of clarity or reference has been put in parentheses.

D. Underlining for emphasis is also the choice of the recorder.

E. This ms. - due to distances and work-pressures - was not submitted to AK for revision. He gave, however, his general approval that such a ms. be prepared and distributed. Nevertheless, the responsibility of recording, transcribing and editing its notes rests solely with its compiler.

2) RELATIVE TO THE LOS ANGELES SOCIETY FOR GENERAL SEMANTICS (LASGS):

A. This is a local group composed to date of:
1st, members of AK's L. A. 1935 seminars,
2nd, members of VF's GS Hollywood Class, spring 1939,
3rd, members of AK's L. A. 1939 series.

B. Anyone interested in studying GS and applying its techniques personally or professionally is eligible for membership.

C. Membership fees are $1.00 a year to provide:

1st, notices of local meetings,
2nd, a lending-reference library of GS materials, especially the literature of the Institute of General Semantics, Chicago,
3rd, a fund toward public lectures upon occasion, by scientists and co-workers in fields allied to G.S.

D. The goals of the society emphasize education, functionally and operationally, by application.

3) RELATIVE TO INFORMATION, EVENTS AND SCHEDULE OF THE LASGS:

address: Lloyd Morain, Secretary (phone: PA 0339)
1041 So. Gramercy Drive, Los Angeles

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